



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/716,538

11/20/2003

Hajime Enomoto

826.1905

5240

21171 7590 03/19/2008

STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

BERMAN, MELISSA J

ART UNIT

PAPER NUMBER

2129

MAIL DATE

DELIVERY MODE

03/19/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/716,538	<b>Applicant(s)</b> ENOMOTO, HAJIME	
	<b>Examiner</b> MELISSA J. BERMAN	<b>Art Unit</b> 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/20/2003</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This action is responsive to application 10/716538 filed on 11/20/2003. Claims 1-11 have been examined.

#### ***Priority***

Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e).

Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

#### ***Claim Objections***

Claim 1 is objected to because of the following informalities:

- Line 7 in claim 1 has incorrect spacing.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather that the final result achieved by the claimed invention is useful, tangible and concrete. If the

claim is directed to a practical application of the §101 judicial exceptions producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. §101.

The invention must be for a practical application and either:

- 1) specify transforming (physical thing - article) or
- 2) have the Final Result (not the steps) achieve or produce a  
useful (specific, substantial, AND credible),  
concrete (substantially repeatable/non-unpredictable), AND  
tangible (real world/non-abstract) result  
(tangibility is the opposite of abstractness).

Claims 1 and 11 do produce a final result. The system described in claims 1 and 11 is for service effect improvement, however it is unclear how a service effect is improved. A hierarchical system of model and model improvement is described, but there is not indication how a service is improved or how a service is implemented into this system of models.

Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, and 4-11 are rejected under 35 U.S.C. 102(b) as being anticipated by

**Enomoto et al.** (Patent No. 5895459) hereafter referred to as **Enomoto**.

**Claim 1, 11**

**Enomoto** disclosed a service effect improving system having an object network as a language processing function (see e.g., C 1 L 15-35; C 2 L 1-10) and a common platform as an interface function with a client (see e.g., C 1 L 55-67, especially "a communication manager in the common platform mediates between the client") for offering a service depending on an intention of a client, comprising (see e.g., C 4 L 44-67, especially "preparing service plans according to the intentions of the user", L 58-62):

an object forming the system having a hierarchical structure comprising (system hierarchy, see e.g., Abstract, C 2 L 38-61):

a data model whose attribute structure is determined as a template (see e.g., C 2 L 38-61, especially "the data models representing attribute-value structures by using template-format schema", L 45-46; C 7 L 39-49);

an object model arranged in a higher order than the data model (see e.g., C 2 L 38-61; C 7 L 50-53);

a role model which is arranged in a higher order than the object model, and represents contents of a process to be performed in an environment as a set of a plurality of object models (Fig 24, see e.g., Abstract; C 2 L 38-61; C 23 L 14-60, especially "a role is defined as a structure of object networks", L 15-17, where a network of objects reads on a plurality of object models); and

a process model which is arranged at a highest order and defines a dynamic process cooperatively performed by a plurality of role models as one process (see e.g., C 2 L 38-61; C 8 L 27-31); and

a model adaptation unit performing adaptation for improvement of a service effect independently for each model of an object in the hierarchical structure (see e.g., Abstract; C 2 L 38-61, especially “an operation control system for controlling processes to proceed by effecting inter-model connections”; C 20 L 10-30, especially “The WELL system is intended to enhance system performance through interactive cooperative processes, and the interaction operation control system necessary to this end has tow main objectives of rendering services", where enhancing system performance through interactive cooperative processes reads on adaptation for improvement).

#### **Claim 2**

**Enomoto** disclosed the system according to claim 1, wherein:

said service system uses a network formed by a plurality of clients (client, user, agent-role server, see e.g., C 5 L 53-59; C 23 L 61-67 to C 24 L 1-4) and a plurality of servers (plurality of servers, see e.g., C 20 L 12 -23) for offering a service; and

said model adaptation unit performs adaptation for attaining an intention of each client (see e.g., C 17 L 45-56).

#### **Claim 4**

**Enomoto** disclosed the system according to claim 1, further comprising a modification unit performing generic determiner modification at a specification level on each model of the object (see e.g., C 13 44-67 to C 16 L1-67, where a noun is a determiner), wherein said model adaptation unit adapts a parameter for embodiment of the determiner modification (see e.g., C 13 25-67 to C 16 L1-67, especially C 44 L 35-53).

**Claim 5**

**Enomoto** disclosed the system according to claim 1, wherein:

a consistent restriction item is set as an attribute of an object for an object of each model (constraints, see e.g., C 10 L 24-65; C 11 L 17-67); and

said model adaptation unit performs adaptation such that the consistent restriction can be satisfied (see e.g., C 10 L 24-65; C 11 L 17-67, especially C 11 L 34-61).

**Claim 6**

**Enomoto** disclosed the system according to claim 5, further comprising a validity check unit carrying out a validity check on a process performed by a model of an object of the hierarchical level corresponding to the consistent restriction item by dividing the check corresponding to each hierarchical level (see e.g., C 10 L 24-65; C 11 L 17-67, especially C 11 L 34-61).

**Claim 7**

**Enomoto** disclosed the system according to claim 5, wherein a process situation of a system is divided corresponding to the consistent restriction item (see e.g., C 5 L 9-45; C 10 L 24-65; C 11 L 17-67), and represented as modules corresponding to a syntax structure of an object (see e.g., C 8 L 28-65; 10 L 24-65; C 11 L 17-67; C 22 L 21-49).

**Claim 8**

**Enomoto** disclosed the system according to claim 5, wherein in the syntax structure of the object, a priority is assigned to data of a consistent restriction item as an attribute of the object (constraint priority, see e.g., C 6 L 33-57; C 10 L 49-67).

**Claim 9**

**Enomoto** disclosed the system according to claim 1, further comprising a support role unit supporting adaptation by said model adaptation unit for improvement of a service effect corresponding to a feature of an object model at each hierarchical level (Fig 27, see e.g., C 24 L 47-64; C 25 L 9-33).

**Claim 10**

**Enomoto** disclosed the system according to claim 1, further comprising a reference model which is normal to a hierarchical structure of the data model, object model, role model, and process model, and is used in realizing a basic service to be performed in a process of the object network (see e.g., C 1 L 25-34).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Enomoto** as applied to the claims above, and further in view of **Yunlong et al.** (“The Design of Cooperative Workflow Management Model Based on Agent”, 1999).

**Claim 3**

**Enomoto** disclosed the system according to claim 2, further comprising an external environment data management unit centrally managing cooperative data for the service executing process



which can be referred to in parallel when each party of a plurality of clients and servers requires it (see e.g., C 24 L 36-67 to C 28 L 1-33, especially where the sharing of environmental data reads on referring in parallel),

**Enomoto** does not particularly call for wherein when intentions of a plurality of clients are cooperative intentions of cooperatively realizing mutual requests or conflicting intentions of mutually preventing realization of intentions of opposite parties, said model adaptation unit dynamically performs adaptation for cooperative intentions or conflicting intentions of a group of clients using contents of management of said external environment data management unit.

However, **Yunlong** teaches wherein when intentions of a plurality of clients are cooperative intentions of cooperatively realizing mutual requests or conflicting intentions of mutually preventing realization of intentions of opposite parties (see e.g., §2.4; §4; §4.2, especially p 468), said model adaptation unit dynamically performs adaptation for cooperative intentions or conflicting intentions of a group of clients using contents of management of said external environment data management unit (see e.g., §2.4; §4; §4.2, especially p 468-469). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of **Enomoto** with **Yunlong** because cooperative workflow management enhances the self-organizing, self-learning and coordinating abilities of the system and reduces conflicts (**Yunlong**).

### ***Conclusion***

The prior art of record and not relied upon is considered pertinent to the applicant's disclosure.

- Kawamura et al. (Pat. 6477563)

- Hara et al. (Pat 6141665)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Berman whose telephone number is 571-270-1393. The examiner can normally be reached on 9/4/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on 571-272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melissa Berman

MB

/David R Vincent/

Supervisory Patent Examiner, Art Unit 2129